SYSTEM AND METHOD FOR SEGMENTING
THE LEFT VENTRICLE IN CARDIAC MR IMAGES

Abstract of the Invention

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A method is provided for segmenting a magnetic resonance image of interest of a left ventricle. The method includes determining a myocardium contour according to a graph cut of candidate endocardium contours, and a spline fitting to candidate epicardium contours in the absence of shape

10   propagation. The method further includes applying a plurality of shape constraints to candidate endocardium contours and candidate epicardium contours to determine the myocardium contour, wherein a template is determined by shape propagation of a plurality of magnetic resonance images in a sequence including the magnetic resonance image of interest in the

15   presence of shape propagation.